Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ANTHONY S. MIKSZA

Appeal No. 1997-4292
Application No. 08/515,344

HEARD: April 5, 2000

Before McCANDLISH, Senior Administrative Patent Judge, NASE and GONZALES, Administrative Patent Judges.

NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 to 5, which are all of the claims pending in this application.

We AFFIRM-IN-PART.

BACKGROUND

The appellant's invention relates to stents for placement within lumens of the body (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellant's brief (Paper No. 10, filed September 16, 1996).

The prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Pinchasik et al. (Pinchasik)	5,449,373	Sept. 12, 1995 (filed Mar. 17, 1994)

Claims 1 to 5 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Pinchasik.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejection, we make reference to the answer (Paper No. 11, mailed October 4, 1996) for the examiner's complete reasoning in support of the rejection, and to the brief for the appellant's arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art reference, and to the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

Initially we note that anticipation by a prior art reference does not require either the inventive concept of the claimed subject matter or the recognition of inherent properties that may be possessed by the prior art reference. See Verdegaal Bros. Inc. v. Union Oil Co., 814 F.2d 628, 633, 2 USPQ2d 1051, 1054 (Fed. Cir.), cert. denied, 484 U.S. 827 (1987). A prior art reference anticipates the subject of a claim when the reference discloses every feature of the claimed invention, either explicitly or inherently (see Hazani v. Int'l Trade Comm'n, 126 F.3d 1473, 1477, 44 USPQ2d 1358, 1361 (Fed. Cir. 1997) and RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984)); however, the law of anticipation does not require

that the reference teach what the appellants are claiming, but only that the claims on appeal "read on" something disclosed in the reference (see Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984)).

Claims 1 to 4

We will not sustain the rejection of claims 1 to 4 under 35 U.S.C. § 102(e).

Claims 1 to 4 recite a stent comprising, inter alia, a plurality of expandable cells wherein said cells are arranged circumferentially about the stent so that the stent when in an unexpanded condition has a generally cylindrical construction; and at least one of the expandable cells containing a metal bridge therein wherein the bridge is initially arranged in a folded condition in the cell and wherein when the cells expand, the bridge lengthens to a generally straight configuration, such that the straightened bridge forms an arc of a circle about the expanded cylindrical stent.

Pinchasik discloses an articulated stent. As shown in Figures 2a-2c, the articulated stent, generally designated 100, generally comprising a number of substantially rigid segments 102 connected by connectors 110. Segments 102 present a fine diamond mesh of interconnected diamond shaped cells 108 having 1 mm sides on expansion as best seen in

Figure 2c. Depending on the intended diameter of stent 100,

segments 102 typically comprise

between 8-24 diamond shaped cells 108. Connectors 110 comprise links 112 connecting a front end 104 to a tail end 106 of adjacent segments 102. Links 112 preferably extend in a substantially helical fashion between apexes of diamond shaped cells 108 at front and rear ends 104 and 106 of adjacent segments 102 such that the number of links 112 equals the number of cells
108. Links 112 are preferably evenly deployed around perimeters of segments 102 such that connectors 110 can be equally flexed in any direction and to provide continuous and uniform support to both straight and curved portions of a bodily conduit.

Pinchasik teaches that alternate connectors 110 at front and rear ends 104 and 106, respectively, of a segment 102 preferably have links 112 wound in clockwise and counter clockwise
directions. Alternately winding connectors 110 ensures that the rotational displacement of links 112 and adjacent segments 102 relative to the walls of a blood vessel and more importantly the balloon of its delivery system is minimized

when stent 100 is expanded. Pinchasik also teaches that it is a particular feature of his invention that connectors 110 have a generally cylindrical configuration when stent 100 is relaxed as best seen in Figure 2a and a differentially stretched and compressed curved configuration when stent 100 is flexed as best seen in Figure 2b. The flexed configuration is brought about by two relatively opposing displacements of links 112. First, the differential stretching of connectors 110 occurs at the convex portion thereof denoted 114 by links 112 being displaced away from one another. Second, the differential compressing of connectors 110 occurs at the concave portion thereof denoted 116 by links 112 being displaced towards one another. Stent 100 has a constricted diameter for delivery through a curved bodily conduit as shown in Figures 2a and 2b and an expanded diameter as shown in Figure 2c for supporting a bodily conduit. Stent 100 is preferably fabricated from low memory, more plastic than elastic, bio-compatible material, for example, stainless steel 316L, gold, tantalum, etc. which enables it to be plastically deformed from its constricted diameter to its expanded diameter. The

constricted and expanded diameters of stent 100 typically fall in the ranges of 1.0-3.5 mm and 3.5-10.0 mm, respectively.

The examiner's position with respect to claims 1 to 4 is that Pinchasik discloses a stent with a plurality of expandable cells with a folded bridge in at least one cell. The examiner states that

> Fig. 2C best shows the bridges which are considered by the examiner to be the upper and lower side segments of the diamonds in the middle of the stent. The examiner notes that in Figs. 2A, 2B, the bridges are initially arranged in a folded condition. A "cell", as interpreted by the examiner, is best shown in Fig. 2C, but it would be present in Figs. 2A and 2B also. A "cell" is considered by the examiner to be two adjacent diamonds and the elongated rectangular section on either side of the intersection point of the two diamonds. Thus as seen by the examiner, each "cell" contains two adjacent bridges that are connected together at their middle. It is an inherent function of the stent and bridges that if the stent is expanded far enough, the bridges will straighten out and form a continuous ring around the middle of the stent.

The appellant argues (brief, p. 2) that Pinchasik lacks the claimed "bridge" which initially starts in a folded condition and which expands (i.e., lengthens) to form an arc

of a circle. The appellant also argues (brief, pp. 2-3) that the examiner has not presented any evidence that the claimed "bridge" is inherent in Pinchasik.

After careful consideration of the respective positions articulated by the appellant and the examiner and the teachings of Pinchasik we find ourselves in agreement with the appellant's position that claims 1 to 4 are not anticipated by Pinchasik. In that regard, it is our determination that the "bridge" identified by the examiner within the "cells" of Pinchasik does not lengthen to form an arc of a circle as recited in claims 1 to 4. At best, the "bridge" identified by the examiner within the "cells" of Pinchasik lengthens to form an arc of an ellipse. Additionally, the examiner's position that it is inherent that if Pinchasik's stent is expanded far enough, the bridges will straighten out and form a continuous ring around the middle of the stent is shear speculation without any support within the disclosure of Pinchasik.[1]

[1] When relying upon the theory of inherency, the examiner (continued...)

For the reasons set forth above, the decision of the examiner to reject claims 1 to 4 under 35 U.S.C. § 102(e) is reversed.

Claim 5

We sustain the rejection of claim 5 under 35 U.S.C. § 102(e).

Claim 5 reads as follows:

> A stent comprising a plurality of expandable cells, and at least one of said cells having an expansion limiting bridge contained therein, said bridge causing said cell to have a finite expansion limit in one lateral dimension.

The examiner's position with respect to claim 5 is that Pinchasik discloses a stent with a plurality of expandable

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[1](...continued)
must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. See Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Patent App. & Int. 1990).

cells with a folded bridge in at least one cell. The examiner states that

> the short segments at the ends of the stent are considered by the examiner to be bridges and are considered to be within the cell. Assuming, arguendo, they are not within the cell rejection above relating to claim 1 also rejects claim 5 (i.e., the bridges interior to the outside bridges are contained within the cells as the cell is defined in claim 1 above.

The appellant argues (brief, p. 3) that Pinchasik lacks the claimed "bridge" which causes a cell to have a finite expansion limit in one lateral dimension.

This time, after careful consideration of the respective positions articulated by the appellant and the examiner and the teachings of Pinchasik we find ourselves in agreement with the examiner's position that claim 5 is anticipated by Pinchasik. In that regard, it is our determination that the "bridge" identified by the examiner would inherently causes a cell to have a finite expansion limit in one lateral dimension. This would be due to the fact that Pinchasik's stent is preferably fabricated from low memory, more plastic than elastic, bio-compatible material, for example, stainless

steel 316L, gold, tantalum, etc. which enables it to be plastically deformed from its constricted diameter to its expanded diameter. In our view, this basis in fact and/or technical reasoning is sufficient to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. See Ex parte Levy, supra.

After the PTO establishes a prima facie case of anticipation based on inherency, the burden shifts to the appellant to prove that the subject matter shown to be in the prior art does not possess the characteristics of the claimed invention. See In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985); In re King, 801 F.2d 1324, 1327, 231 USPQ 136, 138 (Fed. Cir. 1986). The appellant has not come forward with any evidence to satisfy that burden. Compare In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977); In re Ludtke, 441 F.2d 660, 664, 169 USPQ 563, 566-67 (CCPA 1971). In that regard, the appellant's mere argument on page 3 of the brief that Pinchasik lacks the claimed "bridge" which causes a cell to have a finite expansion limit in one

lateral dimension is not evidence. See In re Pearson, 494 F.2d 1399, 1405, 181 USPQ 641, 646 (CCPA 1974)(attorney's arguments in a brief cannot take the place of evidence).

For the reasons set forth above, the decision of the examiner to reject claim 5 under 35 U.S.C. § 102(e) is affirmed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1 to 5 under 35 U.S.C. § 102(e) is affirmed with respect to claim 5 but reversed with respect to claim 1 to 4.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

HARRISON E. McCANDLISH Senior Administrative Patent Judge	)
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